Selected Papers on Design of Algorithms

Donald E. Knuth
Contents

1  Robert W Floyd, in Memoriam  
2  The Bose-Nelson Sorting Problem  
3  A One-Way, Stackless Quicksort Algorithm  
4  Optimum Binary Search Trees  
5  Dynamic Huffman Coding  
6  Inhomogeneous Sorting  
7  Lexicographic Permutations with Restrictions  
8  Nested Satisfiability  
9  Fast Pattern Matching in Strings  
10  Addition Machines  
11  A Simple Program Whose Proof Isn’t  
12  Verification of Link-Level Protocols  
13  A Problem in Concurrent Programming Control  
14  Optimal Prepaging and Font Caching  
15  A Generalization of Dijkstra’s Algorithm  
16  Two-Way Rounding  
17  Matroid Partitioning  
18  Irredundant Intervals  
19  Simple Word Problems in Universal Algebras  
20  Efficient Representation of Perm Groups  
21  An Algorithm for Brownian Zeros  
22  Semi-Optimal Bases for Linear Dependencies  
23  Evading the Drift in Floating-Point Addition  
24  Deciphering a Linear Congruential Encryption  
25  Computation of Tangent, Euler, and Bernoulli Numbers
viii Selected Papers on Design of Algorithms

26 Euler's Constant to 1271 Places 373
27 Evaluation of Polynomials by Computer 383
28 Minimizing Drum Latency Time 397

Index 437